The benefit described in this brochure is part of a comprehensive set of preventive services and screenings covered by Medicare. This brochure provides a basic overview of Medicare's bone mass measurements (bone density studies) benefit.

OVERVIEW

Osteoporosis is a disease in which the bones become weak due to a decrease in bone mass coupled with a decrease in bone density. Osteoporosis produces an enlargement of the pore spaces in the bone, causing increased fragility and an increased risk for fracture.

An estimated 10 million Americans have osteoporosis, and over 34 million Americans have low bone mass, placing them at increased risk for osteoporosis. One out of every two women and one in four men over the age of 50 will have an osteoporosis-related fracture in their lifetime. Osteoporosis is responsible for more than 1.5 million fractures annually, including 300,000 hip fractures, approximately 700,000 vertebral fractures, 250,000 wrist fractures, and more than 300,000 fractures at other sites.[1]

The term "bone mass measurement" or "bone density study" is defined as a radiological or radioisotope procedure, or other procedure approved by the Food and Drug Administration (FDA), performed on a qualified individual for the purpose of identifying bone mass, detecting bone loss, or determining bone quality. Bone mass measurements are used to evaluate diseases of the bone and/or the responses of the bone disease to treatment. The studies assess bone mass or density associated with such diseases as osteoporosis and other bone abnormalities.

[1]National Institutes of Health and Related Bone Diseases - *National Resource Center*. 2004. National Resource Center Fact Sheet, Osteoporosis Overview [online]. Bethesda, MD: The National Institutes of Health and Related Bone Diseases - National Resource Center, National Institutes of Health, The U.S. Department of Health and Human Services, 2003 [cited 15 September 2004]. Available from the World Wide Web: (www.osteo.org/newfile.asp?doc=osteo&doctitle=Osteoporosis+Overview&doctype=HTML+Fact+Sheet).

METHODS OF BONE MASS MEASUREMENTS

Bone density is usually studied by using photodensitometry, single or dual photon absorptiometry, or bone biopsy. Bone density can be measured at the wrist, spine, hip, or calcaneus (heel). Various single and combined methods of measurement may be required to diagnose bone disease, monitor the course of bone changes with disease progression, or monitor the course of bone changes with therapy. To ensure accurate measurement and consistent test results, bone density studies are to be performed on the same suitably precise instrument, and results must be obtained from the same scanner when comparing a patient to a control population.

Medicare provides coverage for the following types of densitometers:

- A **stationary** device that is permanently located in an office
- A **mobile** device that is transported by vehicle from site to site
- A **portable** device that can be picked up and moved from one site to another

RISK FACTORS

While anyone can develop osteoporosis, some factors that may put individuals at increased risk are listed below; however, Medicare may not cover all of these risk factors.

- Age 50 or older
- Female gender
- Family history of broken bones
- Personal history of broken bones
- Caucasian or Asian ethnicity
- Small-bone structure
- Low body weight (less than 127 pounds)
- Frequent smoking or drinking
- Low-calcium diet

COVERAGE INFORMATION

The Balanced Budget Act of 1997 (BBA) provided for standardization of Medicare coverage of bone density studies. This standardized coverage is effective for claims with dates of service on or after July 1, 1998.

Medicare provides coverage of bone mass measurements once every 2 years (i.e., at least 23 months have passed following the month in which the last Medicare-covered bone density study was performed) only for qualified individuals. Qualified individuals are beneficiaries with any one of the following medical indications:

- A woman who is estrogen-deficient and at clinical risk for osteoporosis, based on her medical history and other findings
- An individual with vertebral abnormalities, as demonstrated by an X-ray to be indicative of osteoporosis, osteopenia (low bone mass), or vertebral fracture
- An individual receiving (or expecting to receive) glucocorticoid (steroid) therapy equivalent to 7.5 mg of prednisone, or greater, per day, for more than 3 months
- An individual with known primary hyperparathyroidism
- An individual being monitored to assess the response to, or efficacy of, an FDA-approved osteoporosis drug therapy

In addition, all of the coverage criteria listed below must be met:

- The individual's physician or qualified non physician practitioner treating the beneficiary must provide an order, following an evaluation of the need for a measurement that includes a determination as to the medically appropriate measurement to be used for the individual.
- The service must be furnished by a qualified supplier or provider of such services under the appropriate level of supervision by a physician.
- The service must be reasonable and necessary for diagnosing, treating, or monitoring an individual as defined above.
- The radiologic or radioisotopic procedure (or other procedure) meets the following requirements:
  - Is performed with a bone densitometer or a bone sonometer device approved or cleared for marketing by the FDA for bone density study purposes
  - Is performed for the purpose of identifying bone mass, detecting bone loss, or determining bone quality
  - Includes a physician's interpretation of the results of the procedure

NOTE: If medically necessary, Medicare may provide coverage for a beneficiary more frequently than every two years. Examples of situations when more frequent bone mass measurements may be medically necessary include, but are not limited to, the following medical conditions:

- Monitoring patients on long-term glucocorticoid (steroid) therapy of more than three months.
- Allowing for a confirmatory baseline bone density study (either central or peripheral) to permit future monitoring of a patient, if the initial test was performed with a different technique than the proposed monitoring method. For example, if the initial test was performed using bone sonometry, and monitoring is anticipated using bone densitometry, Medicare will allow coverage of a baseline measurement using bone densitometry.

Coverage of bone mass measurements is provided as a Medicare Part B benefit. The coinsurance or copayment applies after the yearly Medicare Part B deductible has been met.

FOR MORE INFORMATION

The Centers for Medicare & Medicaid Services (CMS) has developed a variety of educational resources as part of a broad outreach campaign to promote awareness and increase utilization of these preventive benefits.

You can learn more about coverage, billing, coding, and reimbursement of Medicare's preventive services and screenings at www.cms.hhs.gov/medlearn/preventiveservices.asp on the web.

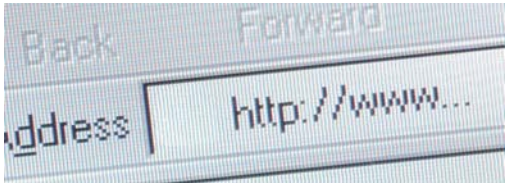
CMS provides many helpful resources for providers, including a searchable Medicare coverage database available at www.cms.hhs.gov/coverage on the web.

FOR BENEFICIARY-RELATED INFORMATION

The official U.S. Government website for people with Medicare is located on the web at www.medicare.gov, or more information can be obtained by calling 1-800-MEDICARE (1-800-633-4227). TTY users should call 1-877-486-2048.

MEDICARE LEARNING NETWORK (MLN)

The Medicare Learning Network (MLN) is the brand name for official CMS educational products and information for Medicare providers. For additional information visit the Medicare Learning Network's Medlearn web page at www.cms.hhs.gov/medlearn.



The information contained in this brochure was current at the time of its development. We encourage users of this brochure to review statutes, regulations, and other interpretive materials for the most current information.

Medicare Learning Network

JANUARY 2005

Medicare Preventive Services

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

For Physicians, Providers, Suppliers, and Other Health Care Professionals

Bone Mass Measurements

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

Medicare Learning Network